

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (currently amended): A vibration apparatus for tooling to break apart clumps of solid media in the tooling, the media being added to provide rigidity during processing, the apparatus comprising:

an elastomeric tooling for forming a structure; and

a container located in [[a]] the tooling, the container comprising:

a top surface;

a bottom surface;

a first layer of elastomeric material located on the bottom surface,

a first conductor located in the first layer;

a second layer of elastomeric material on the first layer, and defining a space between the first layer and the second layer;

a second conductor located in the second layer in proximity to the first conductor;

a cavity located between the top surface and the second layer, wherein the cavity is capable of being filled with a solid media in order to provide rigidity to the tooling during processing;

a power source generating a first current in the first conductor thereby creating a first magnetic field around the first conductor and generating a second current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor,

wherein the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart; and

wherein forcing the first and second layers of elastomeric material apart vibrates the tooling sufficiently to break apart any clumps of solid media in the cavity into smaller pieces of solid media.

Claim 2 (previously presented): The vibration apparatus of claim 1, wherein the power source further comprises:

- a first power source generating a first current in the first conductor; and
- a second power source generating a second current opposite the first current in the second conductor.

Claim 3 (original): The vibration apparatus of claim 2, further comprising:

- a first plurality of capacitors electrically connected to the first power source;
- a first switch electrically connected to the first plurality of capacitors and the first conductor,
- a second plurality of capacitors electrically connected to the second power source; and
- a second switch electrically connected to the second plurality of capacitors and the second conductor.

Claim 4 (original): The vibration apparatus of claim 1, wherein the first and second conductors comprise copper ribbon.

Claim 5 (currently amended): A vibration apparatus for tooling to break apart clumps of solid media in the tooling, the media being added to provide rigidity during processing, the apparatus comprising:

an elastomeric tooling for forming a structure; and

a container located in [[a]] the tooling, the container comprising:

a top surface;

a bottom surface;

a first layer of elastomeric material located on the bottom surface,

a second layer of elastomeric material on the first layer, and defining a space between the first layer and the second layer;

a first conductor comprising copper ribbon and located in the first layer;

a second conductor comprising copper ribbon and located in the second layer in proximity to the first conductor, and

a cavity located between the top surface and the second layer, wherein the cavity is capable of being filled with a solid media in order to provide rigidity to the tooling during processing;

a first power source generating a first current in the first conductor thereby creating a first magnetic field around the first conductor;

a first plurality of capacitors electrically connected to the first power source;

a first switch electrically connected to the first plurality of capacitors and the first conductor;

a second power source generating a second current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor;

a second plurality of capacitors electrically connected to the second power source; and

a second switch electrically connected to the second plurality of capacitors and the second conductor,

wherein the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart; and

wherein forcing the first and second layers of elastomeric material apart vibrates the tooling sufficiently to break apart any clumps of solid media in the cavity into smaller pieces of solid media.

Claim 6 (withdrawn): A tooling for a fuselage comprising

a bag comprising:

a top surface;

a bottom surface;

a first layer of elastomeric material located on the bottom surface,

a second layer of elastomeric material on the first layer and defining a space between the first layer and the second layer;

a first conductor located in the first layer;

a second conductor located in the second layer in proximity to the first conductor;

and

a cavity located between the top surface and the second layer; and

an armature located through the bag;

Claim 7 (withdrawn): The tooling of claim 6, further comprising:

a first power source generating a first current in the first conductor; and

a second power source generating a second current opposite the first current in the second conductor.

Claim 8 (withdrawn): The tooling of claim 7, further comprising:

a first plurality of capacitors electrically connected to the first power source; and

a first switch electrically connected to the first plurality of capacitors and the first conductor, and

a second plurality of capacitors electrically connected to the second power source; and

a second switch electrically connected to the second plurality of capacitors and the second conductor.

Claim 9 (currently amended): A method of vibrating a tooling to break apart clumps of solid media in the tooling, the media being added to provide rigidity during processing, the method comprising:

generating a first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor; and

breaking at least one clump of solid media in the tooling into smaller pieces of solid media by producing a vibration in the tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling

and being in proximity to the first conductor thereby creating a second magnetic field around the second conductor;
wherein the first and second magnetic fields force the first and second conductors apart and;
wherein forcing the first and second conductors apart produces the vibration in the tooling.

Claim 10 (original): The method of claim 9, wherein

generating a current flow in a first conductor further comprises:

providing a charge to a first plurality of capacitors from a first power source; and

releasing the charge from the first plurality of capacitors into the first conductor; and

generating a current flow in a second conductor further comprises:

providing a charge to a second plurality of capacitors from a second power source; and

releasing the charge from the second plurality of capacitors into the second conductor.

Claim 11 (currently amended): A system for vibrating tooling to break apart clumps of solid media in the tooling, the media being added to provide rigidity during processing, the system comprising:

an elastomeric tooling for forming a structure, the tooling including a cavity capable of being filled with a solid media in order to provide rigidity to the tooling during processing;

a first generating component configured to generate a first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor; and

a ~~producing~~ vibration component configured to produce a vibration in the tooling sufficient to break apart at least one clump of solid media in the cavity into smaller pieces of solid media, the vibration component comprising a second generating component configured to generate a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor thereby creating a second magnetic field around the second conductor;

wherein the first and second magnetic fields force the first and second conductors apart and;

wherein forcing the first and second conductors apart produces the vibration in the tooling.

Claim 12 (original): The system of claim 11, wherein

the first generating component further comprises:

a first providing component configured to provide a charge to a first plurality of capacitors from a first power source; and

a first releasing component configured to release the charge from the first plurality of capacitors into the first conductor; and

the second generating component further comprises:

a second providing component configured to provide a charge to a second plurality of capacitors from a second power source; and

a second releasing component configured to release the charge from the second plurality of capacitors into the second conductor.

Claim 13 (canceled).

Claim 14 (currently amended): A system for vibrating tooling to break apart clumps of solid media in the tooling, the media being added to provide rigidity during processing, the system comprising:

an elastomeric tooling for forming a structure, the tooling including a cavity capable of being filled with a solid media in order to provide rigidity to the tooling during processing;

a first generating means for generating a first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor; and

a ~~producing~~ vibration means for producing a vibration in the tooling sufficient to break apart at least one clump of solid media in the cavity into smaller pieces of solid media, the vibration means comprising a second generating means for generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor, thereby creating a second magnetic field around the second conductor; wherein the first and second magnetic fields force the first and second conductors apart and; wherein forcing the first and second conductors apart produces the vibration in the tooling.

Claim 15 (withdrawn): A method of filling a tooling with media comprising;

placing media in the tooling; and

vibrating the tooling to compact the media in the tooling, wherein vibrating further comprises:

generating a first current flow in a first conductor located in the tooling; and

producing a vibration in the tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 16 (withdrawn): The method of claim 15, wherein vibrating the tooling occurs at timed intervals during placing media in the tooling.

Claim 17 (withdrawn): The method of claim 15, wherein

generating a current flow in a first conductor further comprises:

providing a charge to a first plurality of capacitors from a first power source; and
releasing the charge from the first plurality of capacitors into the first conductor;
and

generating a current flow in a second conductor further comprises:

providing a charge to a second plurality of capacitors from a second power source; and
releasing the charge from the second plurality of capacitors into the second conductor.

Claim 18 (withdrawn): A system for filling a tooling with media comprising;

a placing component configured to place media in the tooling; and

a vibrating component configured to vibrate the tooling to compact the media in the tooling, wherein the vibrating component further comprises:

a first generating component configured to generate a first current flow in a first conductor located in the tooling; and

a producing component configured to produce a vibration in the tooling comprising a second generating component configured to generate a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 19 (withdrawn): The system of claim 18, wherein the vibrating component is further configured to vibrate the tooling at timed intervals while placing media in the tooling.

Claim 20 (withdrawn): The system of claim 18, wherein

the first generating component further comprises:

a providing component configured to provide a charge to a first plurality of capacitors from a first power source; and

a releasing component configured to release the charge from the first plurality of capacitors into the first conductor; and

the second generating component further comprises:

a providing component configured to provide a charge to a second plurality of capacitors from a second power source; and

a releasing component configured to release the charge from the second plurality of capacitors into the second conductor.

Claim 21 (withdrawn): A computer-implemented method of filling a tooling with media comprising;

placing media in the tooling; and

vibrating the tooling to compact the media in the tooling, wherein vibrating further comprises:

generating a first current flow in a first conductor located in the tooling; and
producing a vibration in the tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 22 (withdrawn): A system for filling a tooling with media comprising;

a placing means for placing media in the tooling; and
a vibrating means for vibrating the tooling to compact the media in the tooling, wherein the vibrating means further comprises:
a first generating means for generating a first current flow in a first conductor located in the tooling; and
a producing means for producing a vibration in the tooling comprising a second generating means for generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 23 (withdrawn): A method of extracting media from a tooling comprising;

inserting a vacuum into the tooling;
removing media from the tooling using the vacuum; and
vibrating the tooling during removing media to dislodge the media in the tooling, wherein vibrating further comprises:
generating a first current flow in a first conductor located in the tooling; and

producing a vibration in the tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 24 (withdrawn): The method of claim 23, wherein vibrating the tooling occurs at timed intervals during removing media from the tooling.

Claim 25 (withdrawn): The method of claim 23, wherein

generating a current flow in a first conductor further comprises:

providing a charge to a first plurality of capacitors from a first power source; and

releasing the charge from the first plurality of capacitors into the first conductor; and

generating a current flow in a second conductor further comprises:

providing a charge to a second plurality of capacitors from a second power source; and

releasing the charge from the second plurality of capacitors into the second conductor.

Claim 26 (withdrawn): A system for extracting media from a tooling comprising;

an inserting component configured to insert a vacuum into the tooling;

a removing component configured to remove media from the tooling using the vacuum; and

a vibrating component configured to vibrate the tooling while removing media to dislodge the media in the tooling, wherein the vibrating component further comprises:

a first generating component configured to generate a first current flow in a first conductor located in the tooling; and
a producing component configured to produce a vibration in the tooling comprising a second generating component configured to generate a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor.

Claim 27 (withdrawn): The system of claim 26, wherein the vibrating component is configured to vibrate the tooling at timed intervals while removing media from the tooling.

Claim 28 (withdrawn): The system of claim 26, wherein

the first generating component further comprises:

a first providing component configured to provide a charge to a first plurality of capacitors from a first power source; and
a first releasing component configured to release the charge from the first plurality of capacitors into the first conductor; and

the second generating component further comprises:

a second providing component configured to provide a charge to a second plurality of capacitors from a second power source; and
a second releasing component configured to release the charge from the second plurality of capacitors into the second conductor.

Claim 29 (withdrawn): A computer-implemented method of extracting media from a tooling comprising;

inserting a vacuum into the tooling;

removing media from the tooling using the vacuum; and
vibrating the tooling during removing media to dislodge the media in the tooling,
wherein vibrating further comprises:
generating a first current flow in a first conductor located in the tooling; and
producing a vibration in the tooling by generating a second current flow opposite
the first current flow in a second conductor located in the tooling and being in
proximity to the first conductor.

Claim 30 (withdrawn): A system for extracting media from a tooling comprising;
an inserting means for inserting a vacuum into the tooling;
a removing means for removing media from the tooling using the vacuum; and
a vibrating means for vibrating the tooling while removing media to dislodge the
media in the tooling, wherein the vibrating means further comprises:
a first generating means for generating a first current flow in a first conductor
located in the tooling; and
a producing means for producing a vibration in the tooling comprising a second
generating means for generating a second current flow opposite the first current
flow in a second conductor located in the tooling and being in proximity to the first
conductor.